

What is claimed is:

1-14. (cancelled)

15. (new) A refractory nozzle for use in the casting of molten metal having an inlet, an outlet fluidly connected to the inlet, an outer surface, an inner surface defining a bore between the inlet and the outlet, and a top surface surrounding the inlet, the nozzle adapted to receive a flow of inert gas wherein:
- a) a gas-impervious refractory composition lines substantially the entire inner surface; and
 - b) a gas-permeable refractory composition surrounds at least a portion of the gas-impervious composition, the permeable composition having a porosity sufficient to permit diffusion of inert gas.
16. (new) The refractory nozzle of claim 15, wherein the gas-permeable composition has a porosity of at least 15%.
17. (new) The refractory nozzle of claim 15, wherein the permeable composition includes an open-cell pore structure and an average pore size of at least one micron.
18. (new) The refractory nozzle of claim 15, wherein the permeable refractory composition is selected from the group consisting of carbon-bonded refractories, oxide-bonded refractories, resin-bonded refractories, castable refractories and mixtures thereof.
19. (new) The refractory nozzle of claim 15, wherein the gas-impervious refractory composition is selected from the group consisting of carbon-bonded refractories, oxide-bonded refractories, resin-bonded refractories, castable refractories and mixtures thereof.

20. (new) The refractory nozzle of claim 15, wherein the gas-impervious composition includes oxygen getters.
21. (new) The refractory nozzle of claim 15, wherein the gas-impervious composition comprises a resin-bonded refractory comprising 50-90 wt.% refractory aggregate, 1-10 wt.% binder, and 0.5-15 wt.% reactive metal.
22. (new) The refractory article of claim 21, wherein the refractory aggregate comprises at least one refractory material selected from the group consisting of alumina, zirconia, calcia, magnesia, silica, and mixtures and compounds thereof.
23. (new) The refractory nozzle of claim 21, wherein the reactive metal comprises at least one metal selected from the group consisting of aluminum, magnesium, silicon, titanium, and mixtures and alloys thereof.
24. (new) The refractory article of claim 15, wherein the gas-impervious refractory composition is made from a mixture comprising 65-80 wt.% fused alumina, 2-30 wt.% calcined alumina, 1-10 wt.% binder, 0.5-10 wt.% aluminum metal, up to 15 wt.% zirconia, and less than 3 wt.% silica.
25. (new) The refractory nozzle of claim 15, wherein the nozzle includes an inert gas delivery system.
26. (new) The refractory nozzle of claim 25, wherein the gas delivery system is selected from the group consisting of channels, grooves and devices.
27. (new) The refractory nozzle of claim 15, wherein a metal housing at least partially encases the outer surface of the nozzle.
28. (new) The refractory nozzle of claim 15, wherein the permeable composition extends to the top surface, whereby inert gas can purge the molten metal when pressure of the inert gas exceeds ferrostatic head in the molten metal.